



Haverhill Paperboard, 100 S. Kimball Street, Bradford, MA 01835

October 30, 2007

U.S. Environmental Protection Agency, Region 1  
Office of Ecosystem Protection (CMU)  
One Congress Street  
Boston, Massachusetts, 02114-2023  
(via e-mail to: [GeneralPermit.nccw@epa.gov](mailto:GeneralPermit.nccw@epa.gov))

To Whom it May Concern:

This letter is to inform you that the Haverhill Paperboard Corporation located at 100 South Kimball Street in Bradford, Massachusetts (the Facility) requests continued coverage under the General Permit for Non-Contact Cooling Water (NCCW) for the State of Massachusetts (MAG250000).

Please note that our Facility, which has been in continuous operation since construction in 1902, ceased operations on August 29, 2008 and is in the process of complete closure. During the closure process (estimated to be six to 12 months), the Facility requires the use of existing air compressors and therefore will require a permit to use NCCW to operate those compressors. In addition, once facility closure is complete, NCCW will be needed during the property redevelopment process, and likely for the future use of the property, which is not known at this time.

As our consultant MACTEC Engineering and Consulting, Inc. (MACTEC) explained during their telephone conversations with Mr. Damien Houlihan, USEPA during the week of September 15, 2008, some information related to the Facility's cooling water intake structure (CWIS) and the Best Technology Available (BTA) requirements is not available or not known due to the age of the facility (1902). As Mr. Houlihan instructed, we are including explanations of the missing information below, and have completed the NOI to the extent possible based on available information. Additional information is provided as Attachments 1 through 7 to the NOI.

## **1.0 GENERAL BTA DESCRIPTION**

### **Cease or Reduce Intake of Cooling Water**

Based on available information recorded by the Facility for the previous five years, the average monthly discharge flow to the river was approximately 388,000 gallons per day (0.388 MGD). Just prior to shutdown, the Facility withdrew approximately 321,915 gallons per day of water from the Merrimack River. Currently in the shutdown mode, the Facility is using on average, 17,954 gallons per day. As described previously, NCCW will be needed during facility closure and property redevelopment, and will likely be needed for the future use of the property, which is not known at this time.

### **Return All Live Impinged Fish and Conduct a Program to Monitor for Impinged Fish/Invertebrates**

Based on available information, the current configuration of the CWIS does not lend itself to the monitoring of impinged fish/invertebrate. As such, the Facility has not monitored for impinged fish/invertebrates.

## **2.0 FACILITY-SPECIFIC BTA DESCRIPTION**

### **CWIS Design/Attributes and Fish Impingement**

As described in the NOI, the CWIS brings river water by gravity into the Facility. However, other attributes of the CWIS, including the design capacity, the through-screen design intake velocity, the presence and/or condition of a screen at the river intake, and the physical location of the 'mouth' of the intake structure within the Merrimack River are not known. Based on available information, the current configuration of the CWIS does not lend itself to the monitoring of impinged fish/invertebrate.

### **CWIS Operational Measures/Intake Rate**

The Facility ceased operations on August 29, 2008 and is in the process of closure. NCCW will be needed during the closure process, the future for property redevelopment and likely for the future use of the property, which is not known at this time.

## **3.0 RIVER WATER TEMPERATURE CHANGE CALCULATION**

The Facility is currently shutdown. During the closure process (estimated to be six to 12 months), the Facility requires the use of existing air compressors and therefore will require NCCW to operate those compressors. In order to determine the existing heat load discharged from the Facility from the use of the air compressors, MACTEC contacted the manufacturer of the air compressors (Ingersoll-Rand) to obtain the heat load for the units. Since the equipment was manufactured in 1966, that information was not available.

However, with the air compressors in service (one at a time), we calculated an average temperature of the NCCW discharge of 64.2 °F, based on one week of readings collected Monday through Friday during the week of September 22, 2008.

## **4.0 HABITAT INFORMATION**

### **Areas of Critical Environmental Concern (ACEC)**

According to Appendix No. 1 (Massachusetts Areas of Critical Environmental Concern, November 2003) of the NCCW permit, and the most recent version of the ACEC list (March 2007) obtained from the Massachusetts Department of Conservation and Recreation (DCR) website (<http://www.mass.gov/dcr/stewardship/acec/>), Haverhill/Bradford are not listed as communities containing ACEC.

### **Endangered Species**

According to Appendix No. 2 (Endangered Species Act Review and Requirements) of the NCCW permit, the Shortnose Sturgeon is listed as a Federally-Listed Endangered Species (FLES) and is found in the Merrimack River from the Essex Dam in Lawrence, Massachusetts to the Merrimack River's mouth (in Essex). As such, the CWIS of the facility falls within this segment of the Merrimack River. However, the most recent version of the FLES obtained from the United States Fish & Wildlife website (USFW), which is included as Attachment 4 of the NOI, does not include the Shortnose Sturgeon as a FLES, and does not list Haverhill/Bradford as Towns of Essex County where FLES are located.

In accordance with the Endangered Species Act (ESA) eligibility criteria contained in Appendix No. 2 of the permit, MACTEC has initiated informal consultation with the NOAA-Fisheries and the USFWS on September 5, 2008 to confirm the presence of endangered or threatened species or critical habitat, and that the affected discharges as described in the attached NOI are not likely to adversely affect those species or habitat. The consultation process is not complete as of the date of the submittal of this NOI.

As required, enclosed please find the completed NOI form and a copy of the facility's transmittal form BRP WM 11 (Attachment 7) for our previous submittal.

If you have any questions, please feel free to call me at (740) 862-3594.

Sincerely,



Bill Doerr  
Corporate Manager of Environmental Affairs  
The Newark Group  
310 Water Street  
Baltimore, OH 43105

enc Notice of Intent for Non-Contact Cooling Water General Permit with Attachments

cc: Ms. Kathleen Keohane  
Massachusetts Department of Environmental Protection  
Division of Watershed Management  
627 Main Street, 2<sup>nd</sup> Floor  
Worcester, MA 01608  
(via e-mail: [Kathleen.Keohane@state.ma.us](mailto:Kathleen.Keohane@state.ma.us))

**APPENDIX 5**

**Suggested Form for Notice of Intent (NOI) for the Noncontact Cooling Water General Permit**

1. General facility information. Please provide the following information about the facility.

a) Name of facility: <b>Haverhill Paperboard Corp.</b>		Type of Business: <b>Paperboard manufacturer</b>
Facility Location Address : (See Figure 1) <b>100 South Kimball Street Bradford, MA 01835 longitude:-71 03' 10" latitude:42 46' 00"</b>	Facility SIC codes: <b>2631</b>	Facility Mailing Address (if not location address)
b) Name of facility owner: <b>The Newark Group</b>		Email address of owner: <b>BMullen@tngus.com</b>
Owner's Tel #: <b>740-862-3594</b> Owner's Fax # _____	Owner is (check one): 1. Federal _____ 2. State _____ 3. Tribal _____ 4. Private <input checked="" type="checkbox"/> 4. Other _____ (Describe)	
Address of owner (if different from facility address) <b>20 Jackson Drive Cranford, NJ 07016</b>		
Legal name of Operator, if not owner: <b>Northeast Packing Mills</b>		
Operator Contact Name: <b>Rick Theriault</b>		
Operator Tel Number: <b>(978) 373-4111 ext. 231</b>		Fax Number: <b>(978) 372-9112</b>
Operator's email: <b>RTheriault@tngus.com</b>		
Operator Address (if different from owner) <b>100 South Kimball Street, Bradford MA 01835</b>		
d) Attach topographic map indicating the locations of the facility and the receiving water; all NCCW discharge points; upstream and downstream monitoring points. Map attached? <input checked="" type="checkbox"/>		
e) Check Yes or No for the following:		
1. Has a prior NPDES permit been granted for the discharge? Yes <input checked="" type="checkbox"/> No _____ If Yes, Permit Number: <b>MAG250961</b>		
2. Is the discharge a "new discharge" as defined by 40 CFR Section 122.22? Yes _____ No <input checked="" type="checkbox"/>		
3. Is the facility covered by an individual NPDES permit? Yes _____ No <input checked="" type="checkbox"/> If Yes, Permit Number _____		
4. Is there a pending application on file with EPA for this discharge? Yes _____ No <input checked="" type="checkbox"/> If Yes, date of submittal: _____		

**2. Discharge information. Please provide information about the discharge, (attaching additional sheets as needed)**

- a) Name of receiving water into which discharge will occur: Merrimack River  
 State Water Quality Classification: B Freshwater:  Marine Water: \_\_\_\_\_
- b) Describe the discharge activities for which the owner/applicant is seeking coverage: Non-contact cooling water from facility air compressors.
- c) FOR MASSACHUSETTS FACILITIES ONLY: Engineering Calculations: Submit the completed engineering calculation of the surface water temperature rise as shown in Attachment A of the General Permit. Check if attached:
- d) Number of outfalls 1

For each outfall:

- e) What is the maximum daily and average monthly flow of the discharge? Note that EPA will use the flow reported here as the facility's permitted effluent flow limit. Max Daily Flow 990,000 (approximate) GPD Average Flow 388,000 GPD
- f) What is the maximum daily and average monthly temperature of the discharge (in degrees F)? Max Temp. 83 Average Temp. 67
- g) What is the maximum and minimum monthly pH of the discharge (in s.u.)? Max pH 8.28 Min pH 6.70
- h) FOR MASSACHUSETTS FACILITIES ONLY: Is the source water of the NCCW potable water? Yes \_\_\_\_\_ No  If Yes, EPA will calculate the Total Residual Chlorine limit for facilities located in Massachusetts.
- i) Is the discharge continuous? Yes  No \_\_\_\_\_ If no, is the discharge periodic (P) (occurs regularly, i.e., monthly or seasonally, but is not continuous all year) or intermittent (I) (occurs sometimes but not regularly) or both (B) \_\_\_\_\_  
 If (P), number of days or months per year of the discharge \_\_\_\_\_ and the specific months of discharge \_\_\_\_\_  
 If (I), number of days/year there is a discharge \_\_\_\_\_
- j) Latitude and longitude of each discharge within 100 feet: outfall 1: long. -71°03'47.97 lat. 42°45'59.02" outfall 2: long. \_\_\_\_\_ lat. \_\_\_\_\_ outfall .3: long. \_\_\_\_\_ lat. \_\_\_\_\_ (See [http://www.epa.gov/tri/report/siting\\_tool](http://www.epa.gov/tri/report/siting_tool)) (See Figure 2)
- k) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water 984.25 cfs  
 Please attach any calculation sheets used to support stream flow and dilution calculations. See General Permit Attachment B for equations and additional information. (See Attachment 1)

MASSACHUSETTS FACILITIES: See Part 3.4 and Appendix 1 of the General Permit for more information on ACEC.

Areas of Critical Environmental Concern (ACEC): Does the discharge occur in an ACEC? Yes \_\_\_\_\_ No  See Attachment 4.  
 If yes, provide the name of the ACEC: \_\_\_\_\_

**3. NCCW Source Water Information. Please provide information about the NCCW source water, using separate sheets as necessary:**

<p>a) Indicate source of the NCCW (i.e., municipal water supply, private well, surface water withdrawal, groundwater):                  Source: <u>Surface Water</u>                  Name of Source Water: <u>Merrimack River</u></p>	<p>b) If source water is surface water:                  i) Is it a freshwater river or stream Yes <input checked="" type="checkbox"/> No _____                  ii) Is it a lake? <u>No</u> reservoir? <u>No</u>                  iii) Is it tidal river? <u>No</u> estuary? <u>No</u> ocean? <u>No</u></p>
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<p>Is the source registered/permitted under MA Water Management Act or NHDES Water User Registration Rule (Env Wq 2202)?          Yes _____ No <u>✓</u></p> <p>If yes, registration number: _____</p>	<p>c) Is the source water groundwater? Yes _____ No <u>✓</u> If yes, see Appendix 8 and submit effluent and surface water test results, as required in Part 5.4 of the General Permit.</p> <p>d) Does the facility use both a primary and backup source of noncontact cooling water? Yes _____ No <u>✓</u></p> <p>If yes, attach information that identifies and explains the primary and backup sources of noncontact cooling water for and how often the backup supply was used in last three years.</p>
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**4. Best Technology Available for CWIS**

Are you subject to BTA requirements at Part 4.2 of the General Permit? (Facility's discharge is covered by this General Permit and the facility withdraws noncontact cooling water from surface source water). Yes ✓ No \_\_\_\_\_ If No, explain:

If YES, attach the facility-specific BTA description as required in Part 4.3 of the General Permit. For additional information and guidance, see Questions 13-23 of the NCCW Fact Sheet, posted at <http://www.epa.gov/region1/npdes/nccwgp.html>. Provide a map showing the location of each CWIS intake structure; NCCW outfall(s) and any CWIS feature referred to in the BTA description. See Figure 2.

Include in your description:

- \_\_\_\_\_ Measures to meet the General Permit Part 4.3.a general BTA requirements, including documentation that describes the facility's monitoring program for impinged fish and/or invertebrate; or the required alternative monitoring plan frequency and/or protocol
- \_\_\_\_\_ A characterization of the source water body's aquatic life habitat in the vicinity of each CWIS during the seasons when the CWIS may be in use
- \_\_\_\_\_ The attributes of the current CWIS
- \_\_\_\_\_ Design measures of the CWIS
- \_\_\_\_\_ Operation measures of the CWIS
- \_\_\_\_\_ Historical occurrence of impinged fish for the past five years
- \_\_\_\_\_ If applicable, a demonstration that the facility's intake rate is commensurate with a closed-cycle recirculation system
- \_\_\_\_\_ Other components to reduce impingement and/or entrainment of aquatic life

See the Cover letter submitted with this NOI for an explanation of the above information as it pertains to the facility's CWIS.

**4. BTA FOR CWIS CONTINUED:**

Provide the following information for each CWIS to support your attached facility-specific BTA description.

Design capacity of the of the CWIS UNKNOWN (See Attachment 2 for Explanation)

Maximum monthly average intake of the CWIS during the previous five years 0.990 MGD Month in which this flow occurred September 2003

Maximum through-screen design intake velocity UNKNOWN feet/second (fps)

For facilities where the CWIS is located on a freshwater river or stream, provide the following information:

The source water's annual mean flow 9,894 cubic feet/second (cfs) as available from USGS or other appropriate source

The design intake flow as a % of the source water's annual mean flow UNKNOWN Attach calculations if equal to or less than 5% of annual mean flow.

The source water's 7Q10 635 cfs. See Attachment B of the General Permit for more information on 7Q10 determinations.

The design intake flow as a percent of the source water's 7Q10 UNKNOWN

## 5. Contaminant Information

If applicable, attach a listing of all non-toxic pH neutralization and/or dechlorination chemicals used, including chemical name and manufacturer; maximum and average daily quantity used as well as the maximum and average daily expected concentrations (mg/l) in the NCCW discharge, and the vendor's reported aquatic toxicity (NOAEL and/or LC<sub>50</sub> in percent for aquatic organism(s)). **Not Applicable.**

## 6. Determination of Endangered Species Act Eligibility: Provide documentation of ESA eligibility as required at Part 3.4 and Appendix 2, Part C, Step 4, of the General Permit. In addition, respond to the following questions. See Attachment 5.

- a) Are any listed threatened or endangered species, or designated critical habitat, in proximity to the discharge? Yes  No
- b) Has any consultation with the federal services been completed? Yes  No
- c) Is consultation underway? Yes  No  **Informal consultation with the NOAAFS and USFWS was initiated on September 5, 2008.**
- d) What were the results of the consultation with the U.S. Fish and Wildlife Service and/or NOAA Fisheries Service (check one):
  - a "no jeopardy" opinion  or written concurrence  on a finding that the discharges are not likely to adversely affect any endangered species or
- e) Which of the five eligibility criteria listed in Appendix 2, Section B (A,B,C,D or E) have you met? None
- f) Attach a copy of the most current federal listing of endangered and threatened species from the USF&W web site listed in Appendices 2, 2.1 and 4

## 7. Documentation of National Historic Preservation Act requirements: Please respond to the following questions:

- a) Are any historic properties listed or eligible for listing on the National Register of Historic Places located on the facility site or in proximity to the discharge? Yes  No  **See Attachment 6. Consultation with the Massachusetts State Historical Preservation Officer and the Wampanoag Tribal Historic Preservation Officer was initiated on September 5, 2008 to confirm no historic properties are present within the path of the facility's discharge.**
- b) Have any State or Tribal historic preservation officers been consulted in this determination? Yes  or No  If yes, attach the results of the consultation(s). **Consultation is underway.**
- c) Which of the three National Historic Preservation Act requirements listed in Appendix 3, Section C (1, 2 or 3) have you met? **1. Consultation is underway to confirm that no historic properties exist within the facility's discharge path.**

## 8. Supplemental Information: Please provide any supplemental information. Attach any analytical data used to support the application. Attach any certification(s) required by the general permit

## 9. Signature Requirements: The Notice of Intent must be signed by the operator in accordance with the signatory requirements of 40 CFR Section 122.22 (see below) including the following certification:

I certify under penalty of law that (1) no biocides or other chemical additives except for those used for pH adjustment and/or dechlorination are used in the noncontact cooling water (NCCW) system; (2) the discharge consists solely of NCCW (to reduce temperature) and authorized pH adjustment and/or dechlorination chemicals; (3) the discharge does not come in contact with any raw materials, intermediate product, water product (other than heat) or finished product; (4) if the discharge of noncontact cooling water subsequently mixes with other wastewater (i.e. stormwater) prior to discharging to the receiving water, any monitoring provided under this permit will be only for noncontact cooling water; (5) where applicable, the facility has complied with the requirements of this permit specific to the Endangered Species Act and National Historic Preservation Act; and (6) this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted.

Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the

information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

<b>Facility Name:</b> Haverhill Paperboard Corporation
<b>Operator signature:</b> <i>Bill Doerr</i>
<b>Title:</b> CORPORATE MANAGER OF ENVIRONMENTAL AFFAIRS
<b>Date:</b> OCTOBER 30, 2008

Federal regulations require this application to be signed as follows:

1. For a corporation, by a principal executive officer of at least the level of vice president;
2. For a partnership or sole proprietorship, by a general partner or the proprietor, respectively, or,
3. For a municipality, State, Federal or other public facility, by either a principal executive officer or ranking elected official.

**Attachments:**

- Attachment 1 Dilution Factor Calculation for Haverhill Paperboard Facility
- Attachment 2 Best Technology Available (BTA) Requirements
- Attachment 3 River Water Temperature Change Calculation for Haverhill Paperboard Facility
- Attachment 4 Current Endangered Species List
- Attachment 5 ESA Eligibility Criteria Review and Requirements
- Attachment 6 National Historic Preservation Act Review and Requirements
- Attachment 7 Massachusetts Department of Environmental Protection Transmittal Form (BRP WM11) for Previous Application

**Figures**

- Figure 1 Site Location
- Figure 2 Site Map
- Figure 3 NCCW

**ATTACHMENT 1**  
**Dilution Factor Calculation for Haverhill Paperboard Facility**

The facility has an existing permit and is applying for coverage under the NCCW general permit. As allowed under the 2008 permit requirements, the facility used the NPDES NCCW 7Q10 estimates (7/1/2008) posted at the USEPA website (<http://www.epa.gov/region1/npdes/nccwgp.html>) to calculate the dilution factor for the facility's discharge. Since the maximum design flow is not known, the calculations for the dilution factor at the Haverhill Paperboard facility's outfall is based on maximum daily flow obtained from previous five years of available monitoring data records.

**Massachusetts:**

Equation used to calculate the dilution factor at the treatment plant's outfall.

$$\text{Dilution Factor} = \frac{Q_R + (Q_P \times 1.55)}{Q_P \times 1.55}$$

where:

$Q_R$  = Estimated 7Q10 low flow for the receiving water at the plant's outfall, in cubic feet per second (cfs).

$Q_P$  = Plant's maximum design flow, in million gallons per day (MGD).

1.55 = Factor to convert MGD to cfs.

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**Merrimack River** at the facility discharge outfall: 635 MGD

$$Q_R = 635 \text{ MGD} \times 1.55 = 984.25 \text{ cfs}$$

$$Q_P = 0.990 \text{ MGD} \times 1.55 = 1.535 \text{ cfs}$$

$$\text{DF} = \frac{Q_R + (Q_P \times 1.55)}{Q_P \times 1.55} = \frac{984.25 + (0.990 \times 1.55)}{(0.990 \times 1.55)} = \frac{984.25 + (1.535)}{(1.535)} = \frac{985.785}{1.535} = \underline{\underline{642}}$$

**Dilution Factor for Haverhill Paperboard Facility is 642**

**ATTACHMENT 2**  
**Best Technology Available (BTA) Requirements**

**1.0 OVERVIEW**

The facility has one outfall which discharges NCCW to the Merrimack River and one cooling water intake structure (CWIS) which withdraws cooling water from the Merrimack River. (See Figures 1 & 2)

**Outfall No. 2 (Long. -71°03'47.97/Lat.42°45'59.02")**

As shown on Figure 3, the NCCW pipeline, which discharges the NCCW, originates as a floor drain in the turbine room basement. From the basement, the discharge line exits the south side of the building and picks up storm water and roof runoff which enters a large grated area at the base of the building stairs. The discharge line continues to CB #4 at the corner of the building, and then enters the parshall flume. Exiting the flume, the discharge line continues to CB #11, then continues beneath the building and merges with the main non-contact cooling line. The non-contact discharge line turns east underneath the building and picks up the last CB (#1) before the flow is discharged to the Merrimack River through the concrete outfall.

**CWIS**

The cooling water intake structure, which has been in place since the facility began operating in 1902, is a 36-inch 'buried concrete penstock' which brings river water by gravity into the facility. The attributes of the CWIS, including the design capacity, the through-screen design intake velocity, and the presence and/or condition of a screen at the river intake are not known. Also, the physical location of the 'mouth' of the intake structure within the Merrimack River is not known.

River water flows by gravity from the intake to the lowest point in the facility and enters the 'river water pit'. The river water is then pumped up to the 3<sup>rd</sup> floor of the facility where the water is filtered to remove solids. A low-pressure, low-flow 'shower' spray of river water is used to remove solids in the filter system. From the filters, the water flows by gravity into a concrete pit. Currently, this filtered river water is used for wash-up water dispensed via small-diameter hoses, which is collected and then routed to an effluent line that discharges to the City of Haverhill Municipal Wastewater Treatment Plant. Currently, a small amount of the NCCW (approximately 50 gpm) is routed to the facility air compressors.

**ATTACHMENT 2**  
**Best Technology Available (BTA) Requirements (continued)**

**2.0 GENERAL BTAS**

**Cease or Reduce Intake of Cooling Water**

The facility, which has been in continuous operation since the facility was constructed in 1902, ceased operations on August 29, 2008, and is in the process of complete facility closure. Based on available information recorded by the facility for the previous five years, the maximum monthly average discharge flow to the river was approximately 0.990 MGD, which occurred in September 2003. Just prior to facility shutdown, the facility withdrew approximately 321,915 gallons per day of water from the Merrimack River. Continued use of river water as NCCW will be needed as the Facility proceeds through the permanent closure process, during property redevelopment, and likely for the future use of the property, which is unknown at this time.

**Return All Live Impinged Fish and Conduct a Program to Monitor for Impinged Fish/Invertebrates**

Based on available information, the current configuration of the CWIS does not lend itself to the monitoring of impinged fish/invertebrate. As such, the facility has not implemented an impinged fish/invertebrates monitoring program.

**3.0 FACILITY-SPECIFIC BTA DESCRIPTION**

**CWIS Design/Attributes and Fish Impingement**

The CWIS brings river water by gravity into the facility. The attributes of the CWIS, including the design capacity, the through-screen design intake velocity, and the presence and/or condition of a screen at the river intake are not known. Also, the physical location of the 'mouth' of the intake structure within the Merrimack River is not known. Based on available information, the current configuration of the CWIS does not lend itself to the monitoring of impinged fish/invertebrate. As such, the facility has never monitored for impinged fish/invertebrate. However, facility personnel knowledgeable in the operation of the CWIS stated that they have never observed any fish or fish parts on the river water filters.

**CWIS Operational Measures/Intake Rate**

The facility ceased operations on August 29, 2008, and is in the process of complete closure. In the upcoming months as the facility proceeds through the closure process, NCCW use will be used for the facility air compressors. NCCW will also be needed during property redevelopment and likely for the future use of the property.

## ATTACHMENT 3

### River Water Temperature Change Calculation for Haverhill Paperboard Facility

The Facility will continue to operate one air compressor at a time during the facility closure process, and will require the use of river water for NCCW during compressor operation. The manufacturer of the air compressors (Ingersoll-Rand) was contacted to determine the Btu of the facility air compressors; however, since this equipment was manufactured in 1966, that information was not available. The local contact for Ingersoll-Rand is:

**Boston Customer Center**

908 Turnpike Road, Rte. 9

Shrewsbury, MA 01545

508-842-5769

Contact: Chris Bishop, Sales

With the air compressor in service, the facility calculated an average temperature of the NCCW discharge of 64.2 °F, based on one week of readings collected September 22 through 26, 2008 (Monday through Friday).

**ATTACHMENT 4**  
**CURRENT ENDANGERED SPECIES LIST (from the USF&W web site)**

**FEDERALLY LISTED ENDANGERED AND THREATENED SPECIES  
 IN MASSACHUSETTS**

COUNTY	SPECIES	FEDERAL STATUS	GENERAL LOCATION/HABITAT	TOWNS
Barnstable	Piping Plover	Threatened	Coastal Beaches	All Towns
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	All Towns
	Northeastern beach tiger beetle	Threatened	Coastal Beaches	Chatham
	Sandplain gerardia	Endangered	Open areas with sandy soils.	Sandwich and Falmouth.
	Northern Red-bellied cooter	Endangered	Inland Ponds and Rivers	Bourne (north of the Cape Cod Canal)
Berkshire	Bog Turtle	Threatened	Wetlands	Egremont and Sheffield
Bristol	Piping Plover	Threatened	Coastal Beaches	Fairhaven, Dartmouth, Westport
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	Fairhaven, New Bedford, Dartmouth, Westport
	Northern Red-bellied cooter	Endangered	Inland Ponds and Rivers	Raynham and Taunton
Dukes	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	All Towns
	Piping Plover	Threatened	Coastal Beaches	All Towns
	Northeastern beach tiger beetle	Threatened	Coastal Beaches	Aquinnah and Chilmark
	Sandplain gerardia	Endangered	Open areas with sandy soils.	West Tisbury
Essex	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Gloucester, Essex and Manchester
	Piping Plover	Threatened	Coastal Beaches	Gloucester, Essex, Ipswich, Rowley, Revere, Newbury, Newburyport and Salisbury
Franklin	Northeastern bulrush	Endangered	Wetlands	Montague
	Dwarf wedgemussel	Endangered	Mill River	Whately
Hampshire	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Hadley
	Puritan tiger beetle	Threatened	Sandy beaches along the Connecticut River	Northampton and Hadley
	Dwarf wedgemussel	Endangered	Rivers and Streams.	Hadley, Hatfield, Amherst and Northampton
Hampden	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Southwick
Middlesex	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Groton
Nantucket	Piping Plover	Threatened	Coastal Beaches	Nantucket
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	Nantucket
	American burying beetle	Endangered	Upland grassy meadows	Nantucket
Plymouth	Piping Plover	Threatened	Coastal Beaches	Scituate, Marshfield, Duxbury, Plymouth, Wareham and Mattapoisett
	Northern Red-bellied cooter	Endangered	Inland Ponds and Rivers	Kingston, Middleborough, Carver, Plymouth, Bourne, and Wareham
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	Plymouth, Marion, Wareham, and Mattapoisett.
Suffolk	Piping Plover	Threatened	Coastal Beaches	Winthrop
Worcester	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Leominster

- Eastern cougar and gray wolf are considered extirpated in Massachusetts.
- Endangered gray wolves are not known to be present in Massachusetts, but dispersing individuals from source populations in Canada may occur statewide.
- Critical habitat for the Northern Red-bellied cooter is present in Plymouth County.

7/31/2008

**ATTACHMENT 5**  
**ESA ELIGIBILITY CRITERIA REVIEW AND REQUIREMENTS**

According to Appendix No. 2 (Endangered Species Act Review and Requirements) of the NCCW permit, the Shortnose Sturgeon is listed as a Federally-Listed Endangered Species (FLES) and is found in the Merrimack River from the Essex Dam in Lawrence, Massachusetts to the Merrimack River's mouth (Essex). However, the most recent version of the FLES list obtained from the United States Fish & Wildlife Service website (USFWS), which is included as Attachment 4 of the NOI, does not include the Shortnose Sturgeon as a FLES, and does not list Haverhill/Bradford as Towns of Essex County where FLES are located.

MACTEC initiated informal consultation with the NOAA-Fisheries and the USFWS on September 5, 2008, to confirm that the affected discharges as described in the attached NOI are not likely to adversely affect listed endangered or threatened species or critical habitat. The consultation process is not complete as of the date of the submittal of this NOI.

**ATTACHMENT 6**  
**NATIONAL HISTORIC PRESERVATION ACT REVIEW AND REQUIREMENTS**

Based on information contained in the electronic listing of the National Registry of Historic Places accessed at <http://www.nps.gov/history/nr/research/nris.htm>, no historic properties are identified in the path of the facility's discharge. The following table lists the historic properties identified in Haverhill, Massachusetts.

MACTEC initiated consultation with the Massachusetts State Historical Preservation Officer and the Wampanoag Tribal Historic Preservation Officer to confirm that no historic properties are located within the facility's discharge path.

RESOURCE NAME	ADDRESS	CITY	DATE LISTED	MULTIPLE LISTINGS
Bradford Common Historic District	S. Main St.	Haverhill	1977-09-14	
Davis, Ephraim, House	Merrimack Rd., N of jct. with Amesbury Line Rd.	Haverhill	1990-03-09	First Period Buildings of Eastern Massachusetts TR
Dustin House	665 Hilldale Ave.	Haverhill	1990-03-09	First Period Buildings of Eastern Massachusetts TR
Emerson House	5--9 Pentucket St.	Haverhill	1990-03-09	First Period Buildings of Eastern Massachusetts TR
Hastings--Morse House	595 E. Broadway	Haverhill	1991-03-14	First Period Buildings of Eastern Massachusetts TR
Haverhill Board of Trade Building	16-18 and 38-42 Walnut St.	Haverhill	2007-09-28	
Haverhill Historical Society Historic District	240 Water St.	Haverhill	2005-06-08	
Hazen--Spiller House	8 Groveland St.	Haverhill	1990-03-09	First Period Buildings of Eastern Massachusetts TR
Intervale Factory	402 River St.	Haverhill	1988-06-30	
Main Street Historic District	Main, Summer Sts.	Haverhill	2003-05-09	
Peabody School	170 Salem St.	Haverhill	1986-10-23	
Primrose Street Schoolhouse	71 Primrose St.	Haverhill	1983-06-23	
Rocks Village Historic District	NE of Haverhill at Merrimack River	Haverhill	1976-12-12	
School Street School	40 School St.	Haverhill	1986-10-23	
Washington Street Shoe District	Washington, Wingate, Emerson Sts. Railroad and Washington Sqs.	Haverhill	1976-10-14	

**ATTACHMENT 7**  
**MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION**  
**TRANSMITTAL FORM (BRP WM11) FOR PREVIOUS APPLICATION**



Enter your transmittal number

Your unique Transmittal Number can be accessed online: <http://www.mass.gov/dep/counter/transmfrm.shtml> or call DEP's InfoLine at 817-338-2266 or 800-462-0444 (from 508, 781, and 978 area codes).

### Massachusetts Department of Environmental Protection Transmittal Form for Permit Application and Payment

MA 5250961

1. Please type or print. A separate Transmittal Form must be completed for each permit application.

#### A. Permit Information

FAC 130378 RO 334921

BRP WM 11

NPDES Permit

1. Permit Code: 7 or 8 character code from permit instructions

2. Name of Permit Category

JAN 26 2005

Surface Water Discharge of Non-Contact Cooling Water

3. Type of Project or Activity

2. Make your check payable to the Commonwealth of Massachusetts and mail it with copy of this form to: DEP, P.O. Box 4062, Boston, MA 02211.

#### B. Applicant Information - Firm or Individual

Haverhill Paperboard Corporation

1. Name of Firm - Or, if party needing this approval an individual enter name below:

2. Last Name of Individual

3. First Name of Individual

4. MI

100 South Kimball Street

5. Street Address

Bradford

MA

01835

(978) 373-4111

6. City/Town

7. State

8. Zip Code

9. Telephone #

10. Ext. #

John Kennedy

11. Contact Person

12. e-mail address (optional)

3. Three copies of this form will be needed.

Copy 1 - the original must accompany your permit application. Copy 2 must accompany your fee payment. Copy 3 should be retained for your records

#### C. Facility, Site or Individual Requiring Approval

Haverhill Paperboard Corporation

1. Name of Facility, Site Or Individual

100 South Kimball Street

2. Street Address

Bradford

MA

01835

(978) 373-4111

3. City/Town

4. State

5. Zip Code

6. Telephone #

7. Ext. #

130378

22-2884844

8. DEP Facility Number (if Known)

9. Federal I.D. Number (if Known)

10. BWSC Tracking # (if Known)

4. Both fee-paying and exempt applicants must mail a copy of this transmittal form to:

DEP  
P.O. Box 4062  
Boston, MA  
02211

#### D. Application Prepared by (if different from Section B)\*

1. Name of Firm Or Individual

2. Address

3. City/Town

4. State

5. Zip Code

6. Telephone #

7. Ext. #

8. Contact Person

9. LSP Number (BWSC Permits only)

\* Note: For BWSC Permits, enter the LSP.

#### E. Permit - Project Coordination

1. Is this project subject to MEPA review?  yes  no

If yes, enter the project's EOE file number - assigned when an Environmental Notification Form is submitted to the MEPA unit:

EOEA File Number

#### F. Amount Due

DEP Use Only

##### Special Provisions:

- 1.  Fee Exempt (city, town or municipal housing authority)(state agency if fee is \$100 or less).  
*There are no fee exemptions for BWSC permits, regardless of applicant status.*
- 2.  Hardship Request - payment extensions according to 310 CMR 4.04(3)(c).
- 3.  Alternative Schedule Project (according to 310 CMR 4.05 and 4.10).
- 4.  Homeowner (according to 310 CMR 4.02).

Permit No:

Rec'd Date:

Reviewer:

Check Number

Dollar Amount

Date



Massachusetts Department of Environmental Protection  
Bureau of Resource Protection - Watershed Permitting Program  
**BRP WM 11**

W 058958  
Transmittal Number

Request for General Permit Coverage  
Surface Water Discharge Of Non-Contact Cooling Water

01/10/2005  
Date Received

**A. Facility Information**

Important:  
When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. Project owner:

Haverhill Paperboard Corporation

Name

100 South Kimball Street

Street Address/PO Box

Massachusetts

State

John Kennedy

Contact Person

Bradford

City

01835-7500

Zip Code

(978)373-4111

Telephone Number

2. Project operator (if different from above):

Name

Street/PO Box:

City

State

Zip Code

Contact Person

Telephone Number

3. Facility data (attach topographic map or other map showing facility location):

Haverhill Paperboard Corporation

Name

100 South Kimball Street

Street/PO Box

Bradford

City

MA

State

01835-7500

Zip Code

Email address (optional)

(978) 373-4111

Telephone Number

John Kennedy

Contact Person

4. Standard Industrial Codes (SIC) and description:

2831

Standard Industrial Code (SIC)

Paperboard Manufacturing

Description



**Massachusetts Department of Environmental Protection  
Bureau of Resource Protection – Watershed Permitting Program  
BRP WM 11**

W 058958  
Transmittal Number

**Request for General Permit Coverage**  
Surface Water Discharge Of Non-Contact Cooling Water

01/10/2005  
Date Received

**B. Effluent Characteristics**

Refer to general permit in Federal Register Volume 65, Number 80, April 25, 2000, page 24195-24211:

	Average Monthly	Maximum Daily
Flow, gpd [ $< 1$ MGD]	0.43	0.65
Temperature	62	78
[Warm water fishery must be $< 83^{\circ}\text{F}$ ( $28.3^{\circ}\text{C}$ )] [Cold water fishery effluents must be $< 68^{\circ}\text{F}$ ( $20^{\circ}\text{C}$ )]		
pH (freshwater 6.5-8.3, saltwater 6.5-8.5)	7.39	8.28

Total Residual Chlorine (for potable water supply source only):

N/A

Water source of non-contact cooling water (e.g., municipal, stream withdrawal):

Merrimack River

Receiving waterbody:

Merrimack River (one outfall)

**C. Certifications**

1. The applicant certifies that the discharge consists solely of non-contact cooling water to reduce temperature, and does not come in direct contact with any raw materials, intermediate product, waste product (other than heat), or finished product.

Yes       No

2. The applicant certifies that no biocides or other chemical additives for any purpose are used in the non-contact cooling water.

Yes       No

I certify that the discharge for which I am seeking coverage under the general permit consists solely of non-contact cooling water. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on inquiry of the persons or persons directly responsible for gathering the information, I certify that the information is, to the best of my knowledge and belief, true, accurate, and complete. I certify that I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature

Joseph J. Michaud

Printed Name and Title

01/14/2005

Date



## FIGURES



USGS 7.5 Minute Quadrangle obtained from Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Environmental Affairs



Prepared by BJR Checked by ARM

Figure 1 Site Location

NOI NCCW General Permit  
Haverhill Paperboard Corporation  
Haverhill, Massachusetts  
MACTEC, Inc.

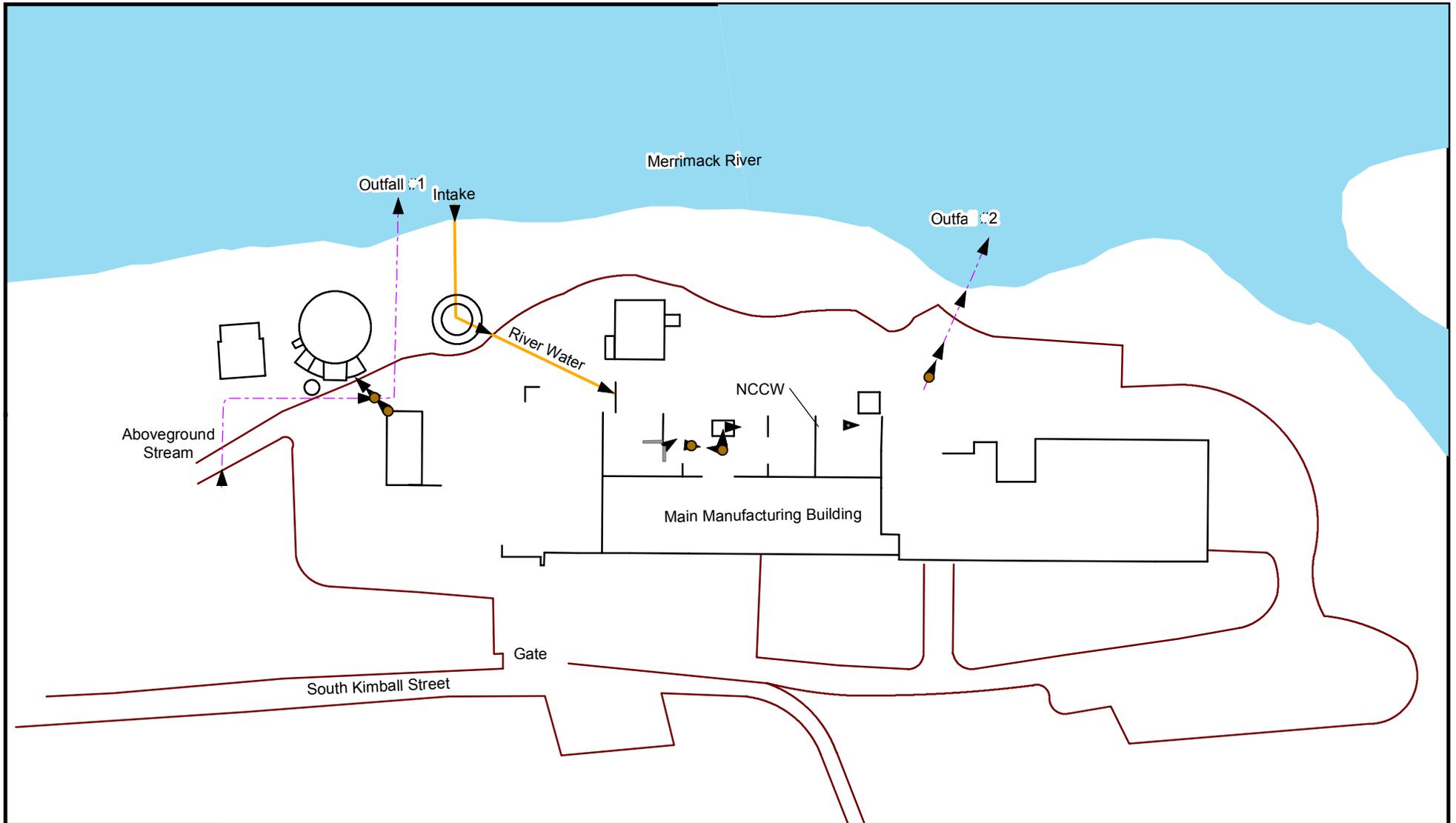
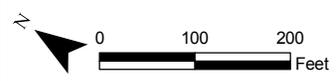


Figure 2  
Site Map



Prepared by BJR | Checked by ARM

**Legend**

- Catch Basin
- Drain
- Pavement
- Building
- ▶ Flow Direction
- Surface Water
- - - Drain Pipe
- Intake Pipe

NOI NCCW General Permit  
Haverhill Paperboard Corporation  
Haverhill, Massachusetts  
MACTEC, Inc.

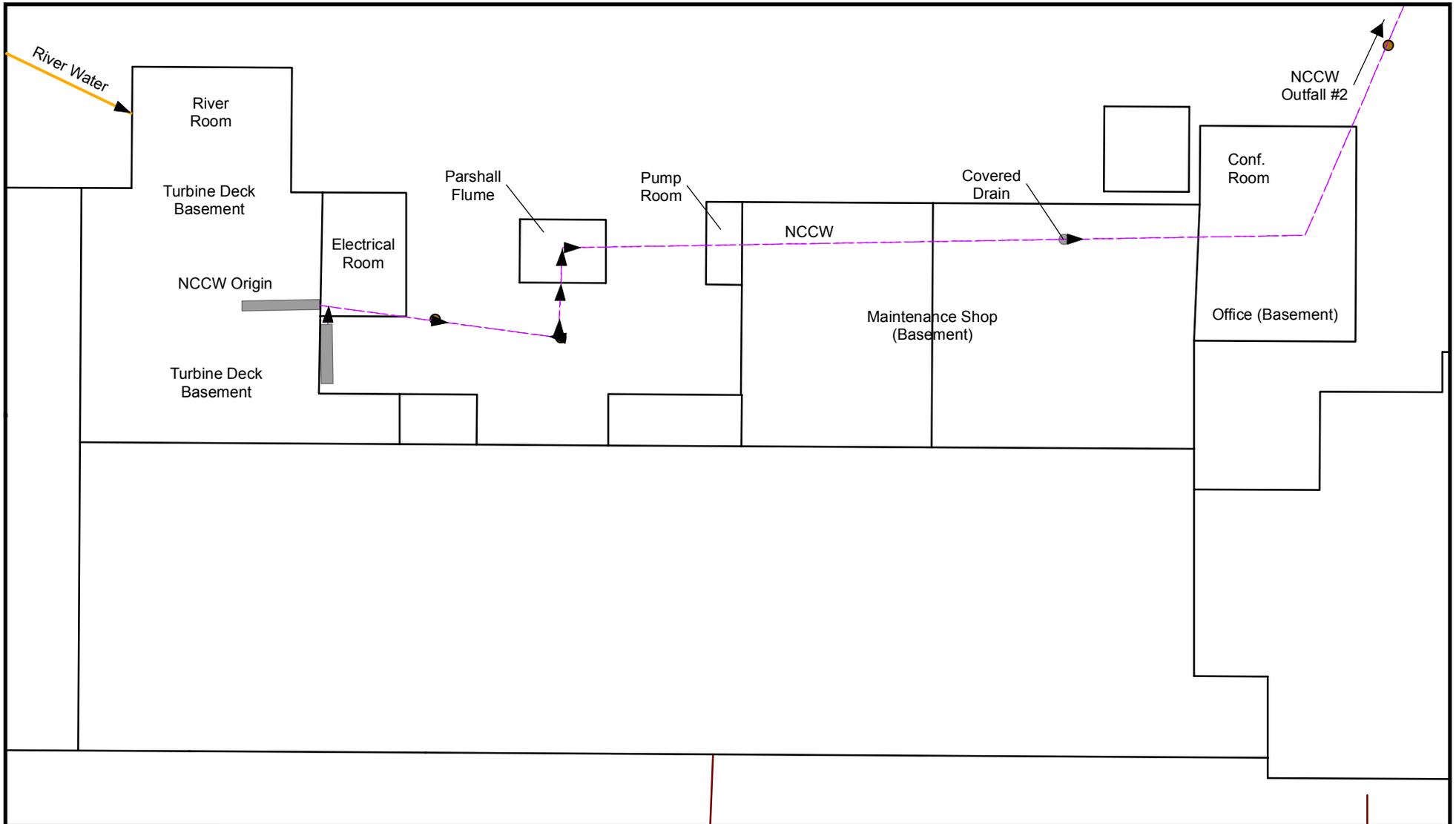


Figure 3  
Non-Contact Cooling Water

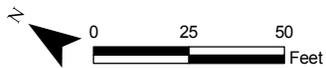
NOI NCCW General Permit  
Haverhill Paperboard Corporation  
Haverhill, Massachusetts

MACTEC, Inc.

Information shown was provided by  
Haverhill Paperboard Corp.

**Legend**

- Building
- Intake Pipe
- - - Drain Pipe
- ▶ Flow Direction
- Pavement
- Drain
- Catch Basin



Prepared by BJR

Checked by ARM